

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 0495015997		Publisher - Thomson Learning		Provided by the Publisher
	Biology: Unity & Diversity of Life				
	Type - P1	Author - Starr/Taggart			
	Copyright - 2006	Edition - 11th	Readability - 10.9 Flesch-Kincaid		
	Course - Biology		Grade(s) - 9,10,11,12		
	Teacher Edition ISBN if applicable			0495125857	

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

This text is recommended as an AP level text. This text is a relatively easy read for an AP text and uses numerous diagrams and images to enhance student engagement. There are additional online resources available from the publisher website that allow animations, preparations tests, and online tutoring which will be an additional tool for the student. The instructors manual offers chapter objectives and outlines for aiding in teacher preparation.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☒ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | | | | |
|---|--|--|---------------------------------|---|
| a) Structure and Transformation of Matter | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| b) Motion and Forces | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| c) The Earth and the Universe | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| d) Unity and Diversity | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| e) Biological Change | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| f) Energy Transformation | <input type="checkbox"/> Strong | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| g) Interdependence | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☐ Strong ☐ Moderate ☐ Little ☐ N/A

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3) **Addresses content-specific skills and concepts from the related Program of Studies standards.** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

4) **Content addressed is current, relevant and non-trivial** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

5) **Provides opportunities for critical thinking/reasoning** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

6) **Strengths, Weaknesses, Comments:**

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

Opportunities for reasoning and critical thinking are primarily found within the chapter reviews at the end of each chapter. The content is current and relevant to what would be expected for this level of class. The depth of coverage is adequate to allow students and teacher to properly prepare for the advanced placement exam.

B. Functionality & Suitability

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) **Suitability** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) **Content quality** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) **Connections to Literacy**

Note: may apply to either student or teacher editions

☐ Strong ☒ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) **Connections to Technology** ☐ Strong ☒ Moderate ☐ Little

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- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☐ Moderate ☒ Little

- Provides support for ESL students
 - Provides support for differentiation of instruction in diverse classrooms
- Note: may apply only to teacher edition*

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The text is designed in a manner as to be very functional for student and teacher use. While there are key concepts identified for each chapter and links to earlier concepts noted at the beginning of the chapter, the reading level appeared to be quite constant throughout. The key vocabulary addressed is extensive and adequately identified in the instructors manual and by bold print in the student edition (used in context). Support for ESL students was not noted in the student edition or instructors manual.

C. Supports Inquiry and Skill Development

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☐ Strong ☒ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
- Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
- Provides opportunities to examine a range of types of evidence
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

The instructors manual includes ideas for classroom discussion, demonstration ideas, and presentation suggestions which will allow students opportunities to use and make sense of data, and provide opportunities for critical thinking. There was little evidence of opportunity for inquiry, however the AP Biology labs come from a predetermined group and are not included in this text. The classroom and laboratory enrichment activities identified in the instructors manual will give students the opportunity to develop inquiry type process skills.

D. Supports Best Practices of Teaching and Learning

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☐ Strong ☒ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

The assessment in the student edition primarily consists of end of chapter reviews including a self quiz, and critical thinking questions. It should be noted that the critical thinking questions are very applicable to the student and often require extensive student thought. The student text is written in a fashion as to engage the reader and encourage motivation.

E. Has an Organization/ Format that Supports Learning and Teaching

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size

Included media are durable, easy to use and have technical merit

- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☐ Strong ☐ Moderate ☐ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The text is well organized and flows well throughout. The sequence of information flows in a logical manner allowing students to build new concepts on to previous learned concepts. Specific objectives are listed in the instructor's manual and the student edition identifies key concepts to be covered in each chapter. The forms of media used are limited to the text and use of the website resource.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The ancillary materials include a test bank of questions and test generator which is based on the text. The ancillary materials offered are well organized and appear that they will enhance teaching and instruction. Transparencies in the ancillary package will

allow for student discussion and engagement.